

## II- LIPOCALIN-2 (\*corresponding author)

### *Original discoveries:*

1. **Wang Y**, Lam KS, Kraegen EW, Sweeney G, Zhang J, Tso AW, Chow WS, Wat NM, Xu JY, Hoo RL, Xu A\*. Lipocalin-2 is an inflammatory marker closely associated with obesity, insulin resistance, and hyperglycemia in humans. *Clinical Chemistry* 2007 Jan;53(1):34-41.

### *Characterization and validation of lipocalin-2 as a causative factor for cardiometabolic renal syndrome:*

1. Law IK, Xu A, Lam KS, Berger T, Mak TW, Vanhoutte PM, Liu JT, Sweeney G, Zhou M, Yang B, **Wang Y**\*. Lipocalin-2 deficiency attenuates insulin resistance associated with ageing and obesity. *Diabetes* 2010 Apr;59(4):872-882. doi: 10.2337/db09-1541.
2. Yang B, Fan P, Xu A, Lam KSL, Berger T, Mak TW, Tse HF, Yue JWS, Song E, Vanhoutte PM, Sweeney G, **Wang Y**\*. Improved functional recovery to I/R injury in hearts from lipocalin-2 deficiency mice: Restoration of Mitochondrial Function and Phospholipids Remodeling. *American Journal of Translational Research* 2012;4(1):60-71.
3. Liu JT, Song E, Xu A, Berger T, Mak TW, Tse HF, Law IK, Huang B, Liang Y, Vanhoutte PM, **Wang Y**\*. Lipocalin-2 deficiency prevents endothelial dysfunction associated with dietary obesity: role of cytochrome P450 2C inhibition. *British Journal of Pharmacology* 2012 Jan;165(2):520-531. doi: 10.1111/j.1476-5381.2011.01587.x.
4. Ye D, Yang K, Zang S, Lin Z, Chau HT, Wang Y, Zhang J, Shi J, Xu A, Lin S, **Wang Y**\*. Lipocalin-2 mediates non-alcoholic steatohepatitis by promoting neutrophil-macrophage crosstalk via the induction of CXCR2. *Journal of Hepatology* 2016 Nov;65(5):988-997. doi: 10.1016/j.jhep.2016.05.041.
5. Sun WY, Bai B, Luo C, Yang K, Wu Y, Wu D, Félétou M, Villeneuve N, Xu A, Vanhoutte PM, **Wang Y**\*. Lipocalin-2 derived from adipose tissue mediates aldosterone-induced renal injury. *Lipocalin-2 derived from adipose tissue mediates aldosterone-induced renal injury. JCI Insight* 2018 Sep 6;3(17). pii: 120196. doi: 10.1172/jci.insight.120196.

### *Molecular characterization of lipocalin-2 at post-translational levels:*

1. Song E, Fan P, Huang B, Deng HB, Cheung BM, Félétou M, Vilaine JP, Villeneuve N, Xu A, Vanhoutte PM, **Wang Y**\*. Deamidated lipocalin-2 induces endothelial dysfunction and hypertension in dietary obese mice. *JAHA: Journal of the American Heart Association* 2014 Apr 10;3(2):e000837. doi: 10.1161/JAHA.114.000837.
2. Yang K, Deng HB, Man AW, Song E, Zhang J, Luo C, Cheung BM, Yuen KY, Jensen PS, Irmukhamedov A, Elie AG, Vanhoutte PM, Xu A, De Mey J, **Wang Y**\*. Measuring non-polyaminated lipocalin-2 for cardiometabolic risk assessment. *ESC Heart Failure*. 2017 Nov;4(4):563-575. doi: 10.1002/ehf2.12183

### *Invited review:*

1. **Wang Y**\*. Small lipid-binding proteins in regulating endothelial and vascular functions: focusing on adipocyte fatty acid binding protein and lipocalin-2. *British Journal of Pharmacology* 2012 Feb;165(3):603-621. doi: 10.1111/j.1476-5381.2011.01528.x.